Bio-Doremi

Dual Security Fingerprint Door Lock

User's Manual

BDL-700

BDL-730

BDL-600

POTECS CORPORATION

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BIO DOREMI

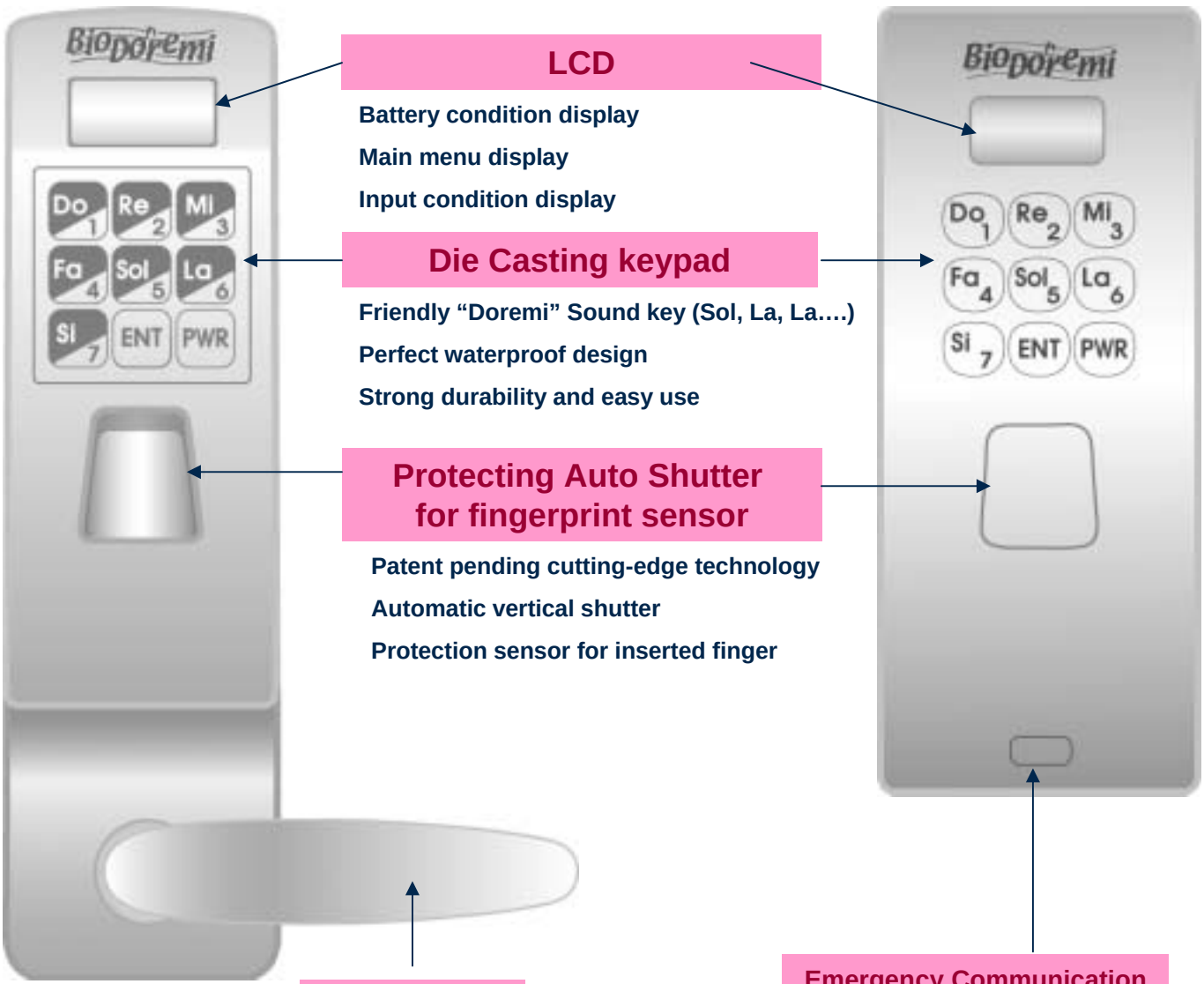
1. INTRODUCTION

1) Presentation

A. External Case

BDL – 700
(Unit Type)

BDL – 600
(Built-in Type)



LCD

- Battery condition display
- Main menu display
- Input condition display

Die Casting keypad

- Friendly “Doremi” Sound key (Sol, La, La….)
- Perfect waterproof design
- Strong durability and easy use

Protecting Auto Shutter for fingerprint sensor

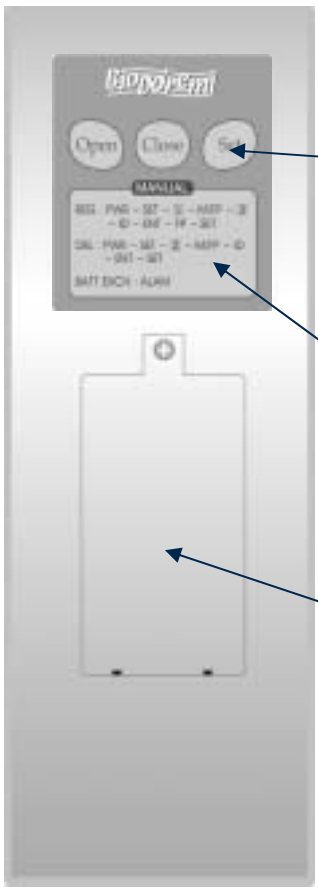
- Patent pending cutting-edge technology
- Automatic vertical shutter
- Protection sensor for inserted finger

LEVER

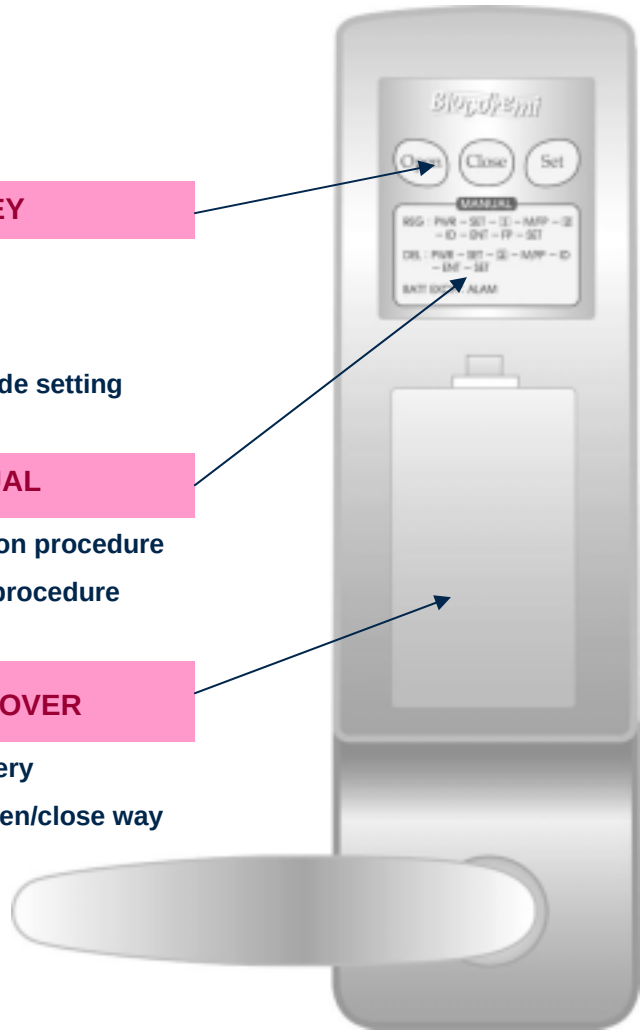
Emergency Communication Terminal

B. Internal Case

BDL – 600 (Built-in Type)



BDL – 700 (Unit Type)



FUNCTION KEY

Open key

Close key

Set key for mode setting

BASIC MANUAL

User registration procedure

User deletion procedure

BATTERY COVER

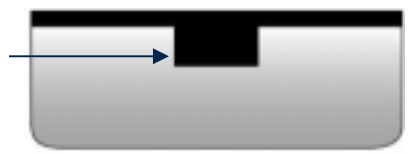
For Li-ion battery

Convenient open/close way

C. Base : BDL 700

Emergency Communication Terminal

Connection terminal for Emergency communication (9V battery connected)



FRONT BASE

Bolt Hole

Hole for socket wrench bolt

REAR BASE

BIO DOREMI

1. INTRODUCTION

2) SPECIFICATIONS

Classification			Specification
Dimension	BDL - 700	External	260mm(L) x 77mm(W) x 45mm(H)
		Internal	260mm(L) x 77mm(W) x 35mm(H)
	BDL - 600	External	205mm(L) x 82mm(W) x 45mm(H)
		Internal	210mm(L) x 74mm(W) x 35mm(H)
Material			Zinc Alloy
Color			Gold, Silver
Option			Mortis Lock & History Back-up
Operating Environments	Temperature		-10℃ ~ +60℃
	Humidity		10 ~ 90 % RH
	Voltage		5.0 ~ 8.0 V
Power	Adaptor	Input	AC 110V~220V/60Hz
		Output	DC 12V/300mA
	Li-ion Battery		7.2V/1850mA : rechargeable
Fingerprint Recognition Sensor	Recognition Sensor		Optical Lens Type
	False Rejection Rate		Less than 0.01%
	False Acceptance Rate		Less than 0.001%
	Verification Time		Less than 1 Second
	User Number		40 Persons (One person:2 images)
Shutter	Sensor/Deceleration Gear		5V DC/3800RPM
Audit Logs	Event Record(Date&Time)		100 Events
	PC Communication		RS232 or RS485

BIO DOREMI

2. HOW TO USE

1) Basic Understanding

WHAT'S THE FINGERPRINT ID?

When registering the fingerprint at this BioDoremi, Identification number(4-digit) should be registered before registering user's fingerprint. The registered number is the Fingerprint ID.

By using this Fingerprint ID, BioDoremi will verify authorized user's fingerprint and record its access data.

ID should be registered as a 4 digits among 7 digit Keys (From 1 to 7).

1. User Registration
   - Register user's ID number and its fingerprint according to its proper order(Please refer to page 11). If the master user have registered before, the master fingerprint will be required in first stage of user registration.
2. Normal Access
   - 1) Press power switch
   - 2) Input USER ID (4 digits)
   - 3) When Electric shutter goes up
   - 4) Place a fingerprint at the sensor for fingerprint verification
   - 5) Door Open

WHAT'S THE MASTER USER?

The master is a person who is authorized to manage all user data including its registration and deletion. If the master user already registered, all operation menu will require verification of master's fingerprint.

WHAT'S THE NORMAL USER?

Normal user can open door using his registered ID and fingerprint only. If a master is registered, a registered normal user will not register other user.

2). Function Key

MAIN KEY (Front Case)

PWR : Power Key. It supplies power to door lock. So When you start operating BioDoremi, all user should press this button to start its verification procedure.
(If there is no key input for 5 seconds, power will be off automatically)

ENT : Enter Key. After pressing a key, press this key to input data to the BioDoremi .

DO(1) ~ SI(7) : Available number key

SETTING KEY (Rear Case)

Open : Lock open

Close : Lock close
(Normal setting Condition)

Set : Use when register or delete normal user and setting time of lock

Configuration of Main Menu(Networking Version)

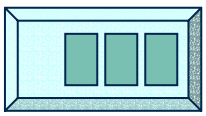
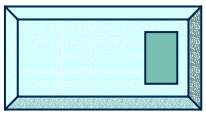
Please select each menu to register, delete user and set each condition. When you want to return to previous menu, please use 'Set' key(on the backside of device) at main menu and 'Ent' key(on the front of device) at sub-menu.

- 1. REG
  - 1. MAST — Register ID & F/P of Master user
  - 2. USE — Register ID & F/P of Normal User
  - 3. EMERGENCY — Register emergency number
- 2 - DEL
  - 1. ALL — Delete registered all User data (ID & F/P)
  - 2. SELE — Delete selected User ID & F/P data
- 3 - STA
  - 1. GATE STAT
    - 1. CHK — Set alarm on for gate open
    - 2. CANC — Set alarm off for gate open
  - 2. BUZZER VOL
    - 1. SUB — Set volume down for alarm & key sound
    - 3. ADD — Set volume up for alarm & key sound
  - 3. MODE
    - 1. 1:1 — See page 14
    - 2. 1:N
      - 1. ENT+FP — Set ENT button available before input fingerprint
      - 2. PWR+FP — Set ENT button unavailable before input fingerprint
  - 4. CHANCE
    - 1. SET
    - 2. CANCEL

    Set the number of fingerprint recognition chances. (SET : 3 times / CANCEL : 1 time)
- 4 - TIME
  - 1. MORTISE
  - 2. SOLENOID

  (both)
    - 1. SUB — Decrease lock open time
    - 3. ADD — Increase lock open time
- 5 - PASS — Register 4 digit of user password - Password user only
- 6 - RTC
  - 1. OK — Set present time to recode access history data
  - 3. CANC — Cancel modified time setting
- 7 - HISTORY
  - 1. LCD
    - 1. Previous — Display previous recoded access data
    - 3. Next — Display next recoded access data
  - 2. COMM — Download access data to PC
  - 3. All Clear — Delete all recoded access data

4) Display Message

Display	Explanation
USER ID >	Waiting for input a user ID
	Displaying battery is full
	Displaying when battery need charge
Put a Finger	Waiting for input a fingerprint
Failed	There is no user ID inputted
Failed 1 !	There is no fingerprint placed on the sensor
Failed 2 !	Fingerprint verification failure
Invalid ID	Unregistered USER ID
Lift finger	Lift finger from the sensor panel
Verified	Fingerprint was verified
Open door	Door was opened

5) Main Operation

A. Master Registration

PWR	Press the PWR key to turn on the power
↓	
SET	Press the SET(rear panel) to turn into setting Mode (Shutter be remained open in setting mode)
↓	
1.REG	Press the No.1 REG to register Master or User
↓	
1.MAST	Press the No.1 MASTER REG to register Master User
↓	
Master ID	Input selected master ID (4 digit)
↓	
ENT	Press the ENT to register ID
↓	
Master Fingerprint	Place master fingerprint on the sensor two times (Register two images : Place two fingerprints by turns or one fingerprint two times on sensor)
↓	
ENT	Press the ENT to back to main menu
↓	
Main Menu	Select other menu or press the Set key on the Internal case to finish all procedure

B. User Registration

PWR	Press the PWR to turn on the power
Set	Press the Set key on the rear panel to turn into setting mode
1.REG	Press the No.1 REG to register normal user
Master ID	Input registered master ID if a master has been Registered already
ENT	Press the ENT key to advance for next procedure
Master Fingerprint	Place registered master fingerprint on the sensor
2.USE	Press the No.2 USER to register normal user
User ID	Input selected user ID (4-digit)
ENT	Press the ENT key to register user ID
User Fingerprint	Place user's fingerprint on the sensor to register (Two images can be registered)
ENT	Press the ENT key to back to the main menu
Main Menu	Select other menu or press the Set key on the Rear panel to finish all procedure

User Sequence Registration

PWR → SET → 1.REG → Master ID → ENT

Master Fingerprint → 2.USE → User 1 ID → ENT → User 1 Fingerprint

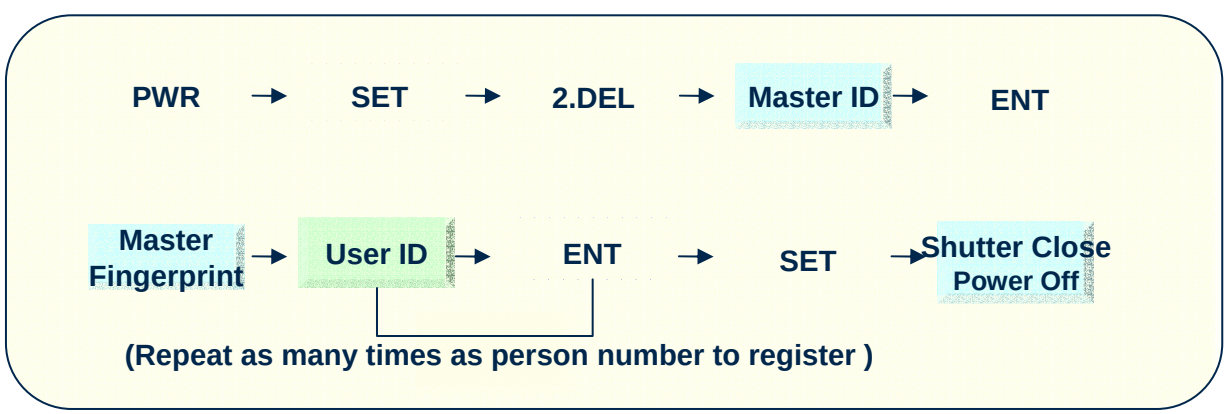
User 2 ID → ENT → User 2 Fingerprint → SET → Shutter Close Power Off

(Repeat same procedure as many as user to register)

C. User Deletion

PWR	Press the PWR key to turn on the power
SET	Press the Set key on the internal case to turn into setting mode
2.DEL	Press the No.DEL to delete user data
Master ID	Input master ID (4-digit) if a master has be registered
ENT	Press the ENT key to advance for next procedure
Master Fingerprint	Place master fingerprint on the sensor
User ID	Input USER ID to delete
ENT	Press the ENT key to back main menu
Main Menu	Press the SET key on the internal case to finish all procedure
Shutter Close Power Off	Shutter will be closed and Power will be off

User Sequence Deletion



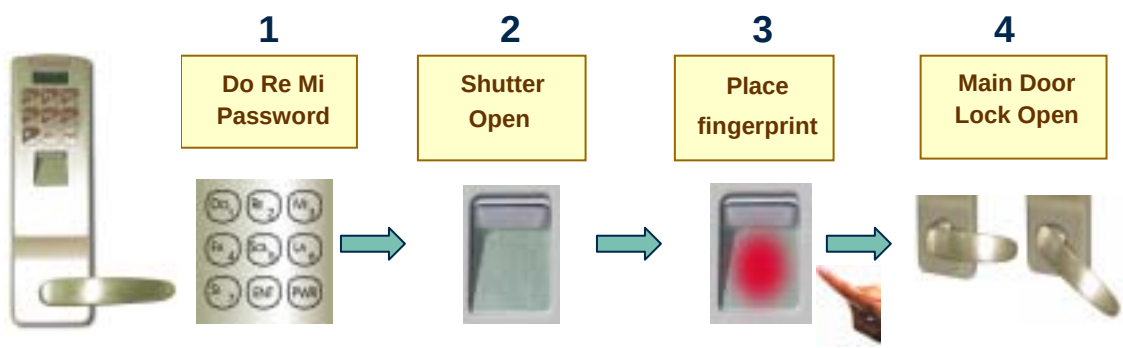
D. All User Deletion

PWR → SET → 2.DEL → Master ID → ENT

Master Fingerprint → 1.ALL → SET → Shutter Close Power Off

E. Normal Entrance

PWR	Press the PWR key to turn on the power
User ID	Input registered User ID number
ENT	Press the ENT key
User Fingerprint	Place registered user fingerprint to the sensor
Door Open	If user fingerprint verified, door will be opened for a time (It was set as 5 seconds from factory)
Shutter Close Power Off	When all above procedure is completed, shutter will be closed and Power will be off



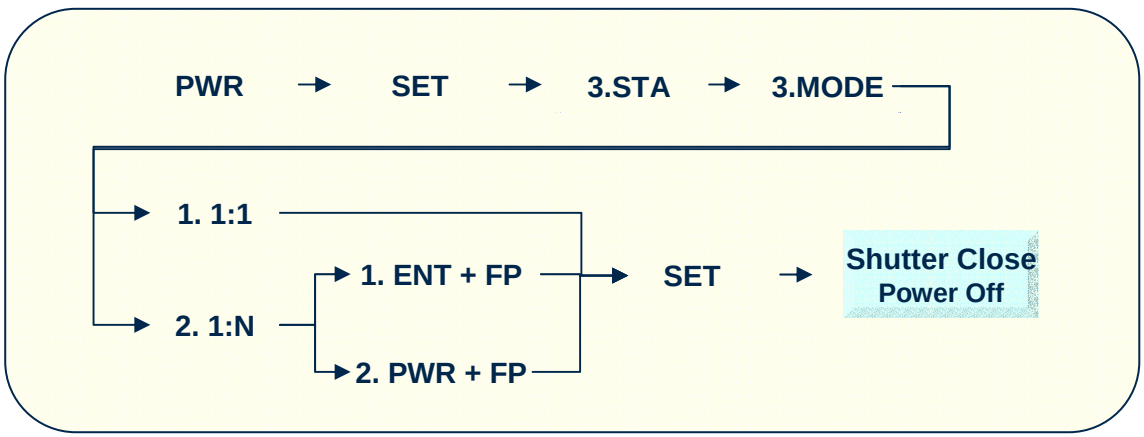
If registered fingerprint is not verified well,
1) clean sensor panel then try again
2) try again using other fingerprint registered.
- More then two fingerprint registration per each user are recommended

F. User Identification Mode Selection(3. STA -> 3. MODE)

1. 1:1 mode : A user enter his/her ID(4 number) before input a fingerprint. This mode identifies the fingerprint entered as his/her finger print registered.
2. 1:N mode : A user doesn't need to enter his/her ID before input fingerprint. This mode checks that the fingerprint entered exists among all fingerprint registered.

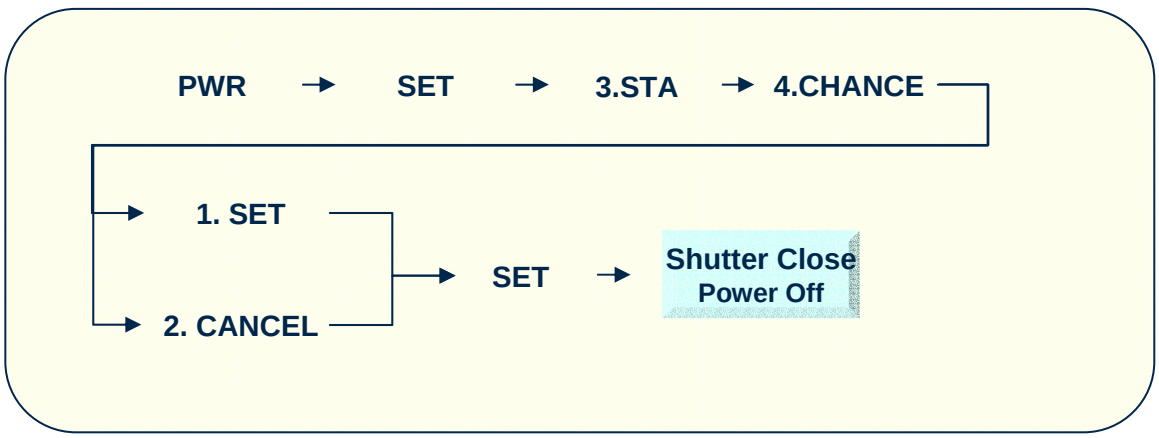
- submenu of 1:N mode -

1. ENT + FP : After push PWR button, push ENT key before input fingerprint.
2. PWR + FP : After push PWR button, input fingerprint directly.



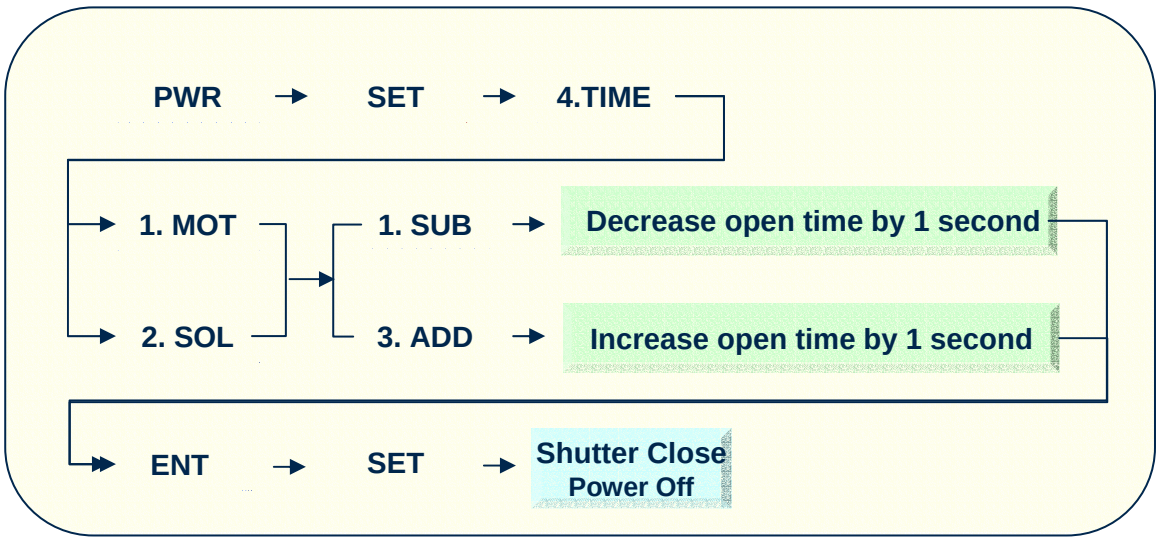
G. The Number of Identification Chances Setting up(3. STA -> 4. CHANCE)

According to the identification mode selected in '3. MODE' menu, set up the number of entering User's ID(1:1 mode) or inputting fingerprint(1:N mode). '1. SET' give 3 times and '2 CANCEL' give just 1 time.



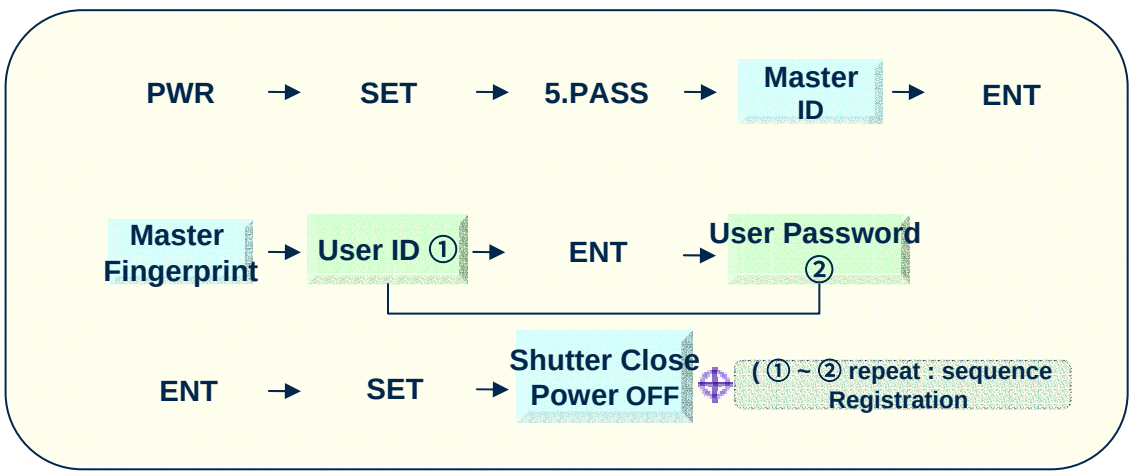
H. Lock Open Time Adjustment

From the factory, lock open time was set as 5 seconds.
Notice! : According to your lock type, select MOT(Mortise) or SOL(Solenoid and Electric - Magnetic lock). If you use the HAMODU mortise, select 1.MOT.

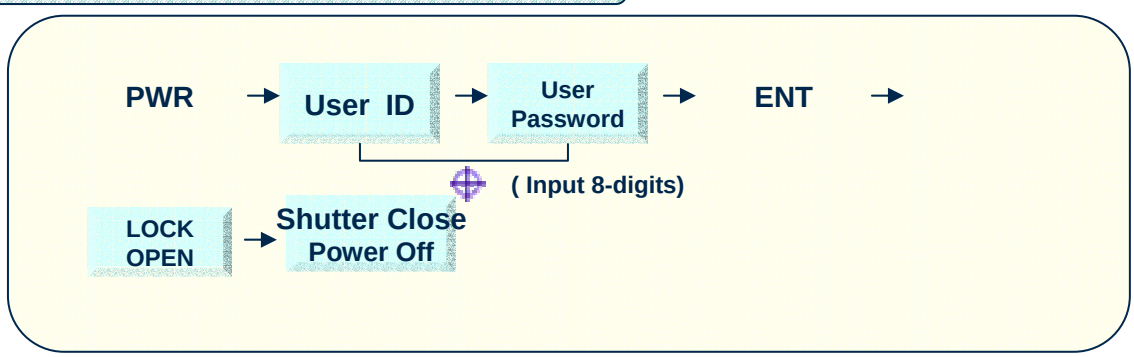


I. Password User Registration

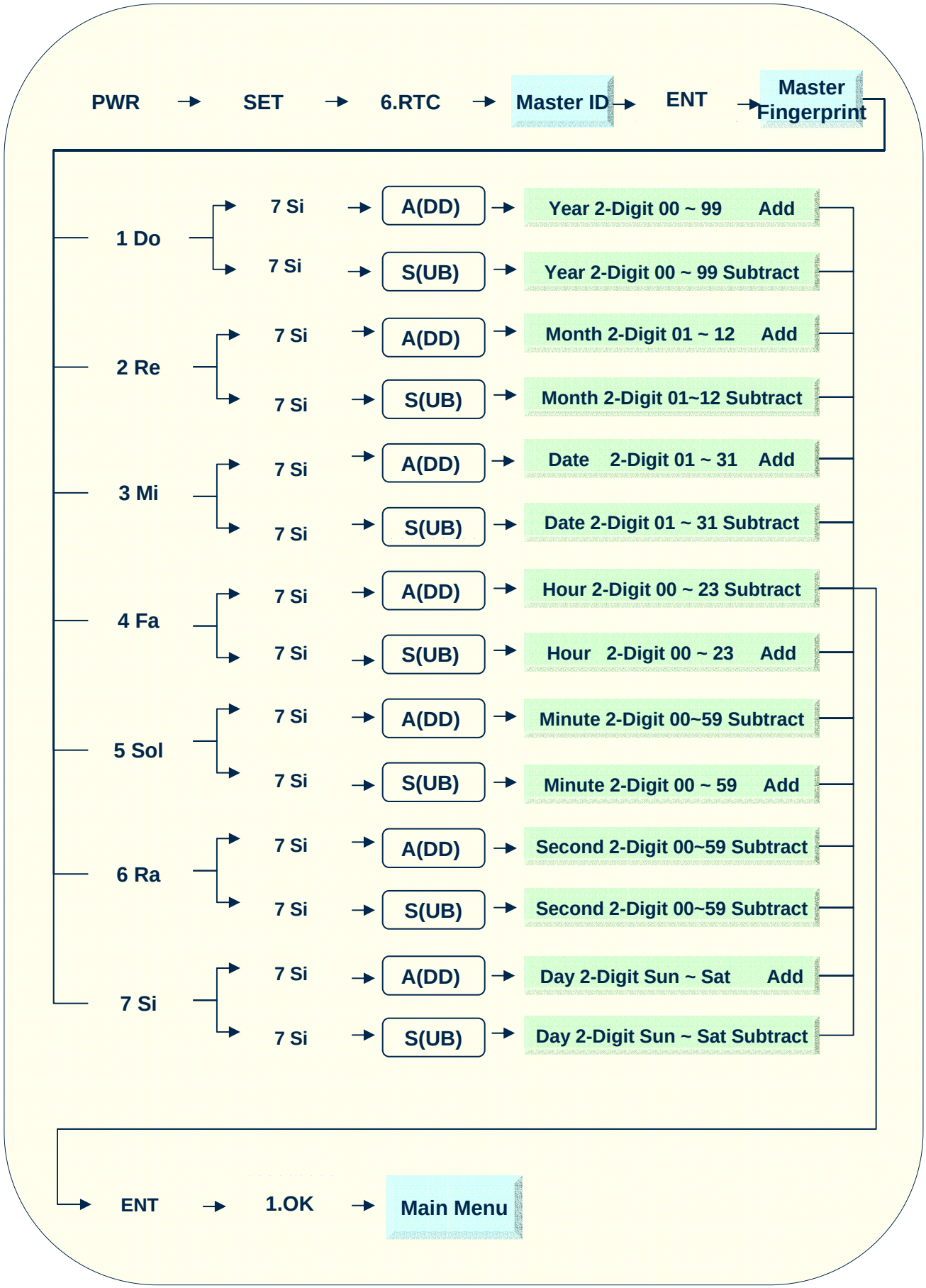
User ID should be registered with fingerprint before registration of its password(4-digit)



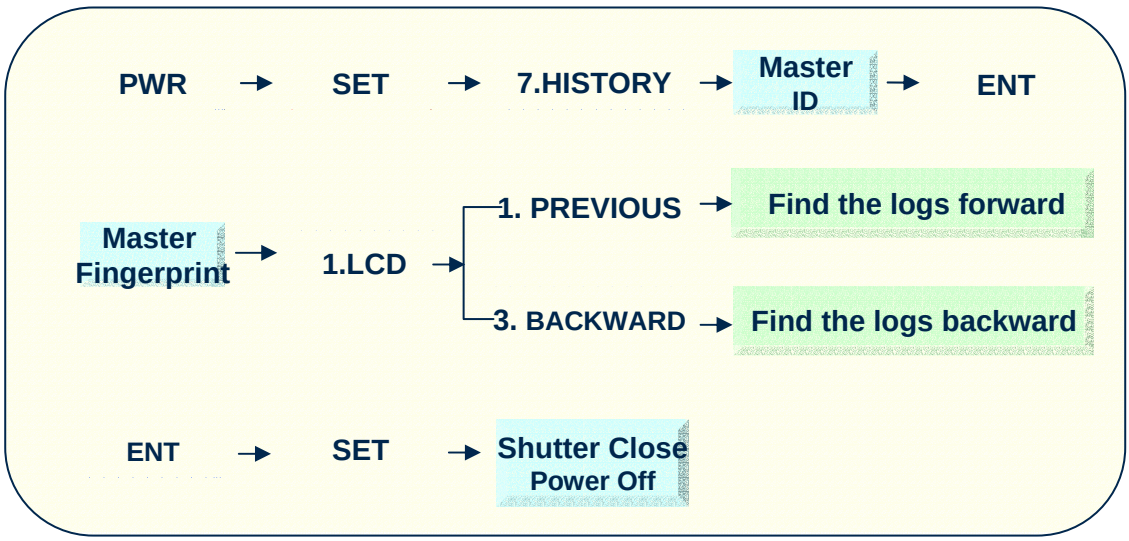
PASSWORD USER ENTERANCE ORDER



J. Date And Time Setting

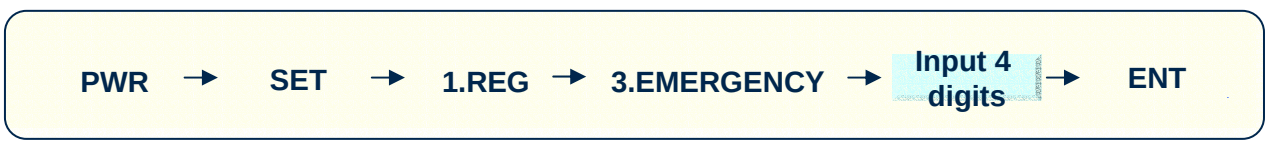


K. Audit Logs(Access history)



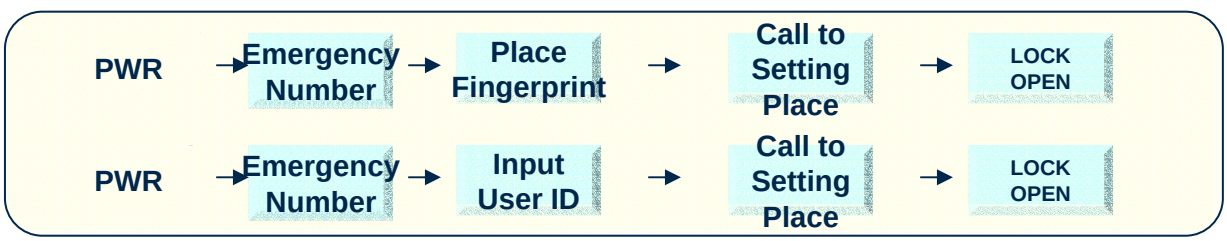
L. Emergency Number Registration

- Emergency Number should be registered as 4 digits



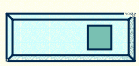
M. Emergency Warning Call

- Installation of additional device such as auto-dialer will be required to use this function



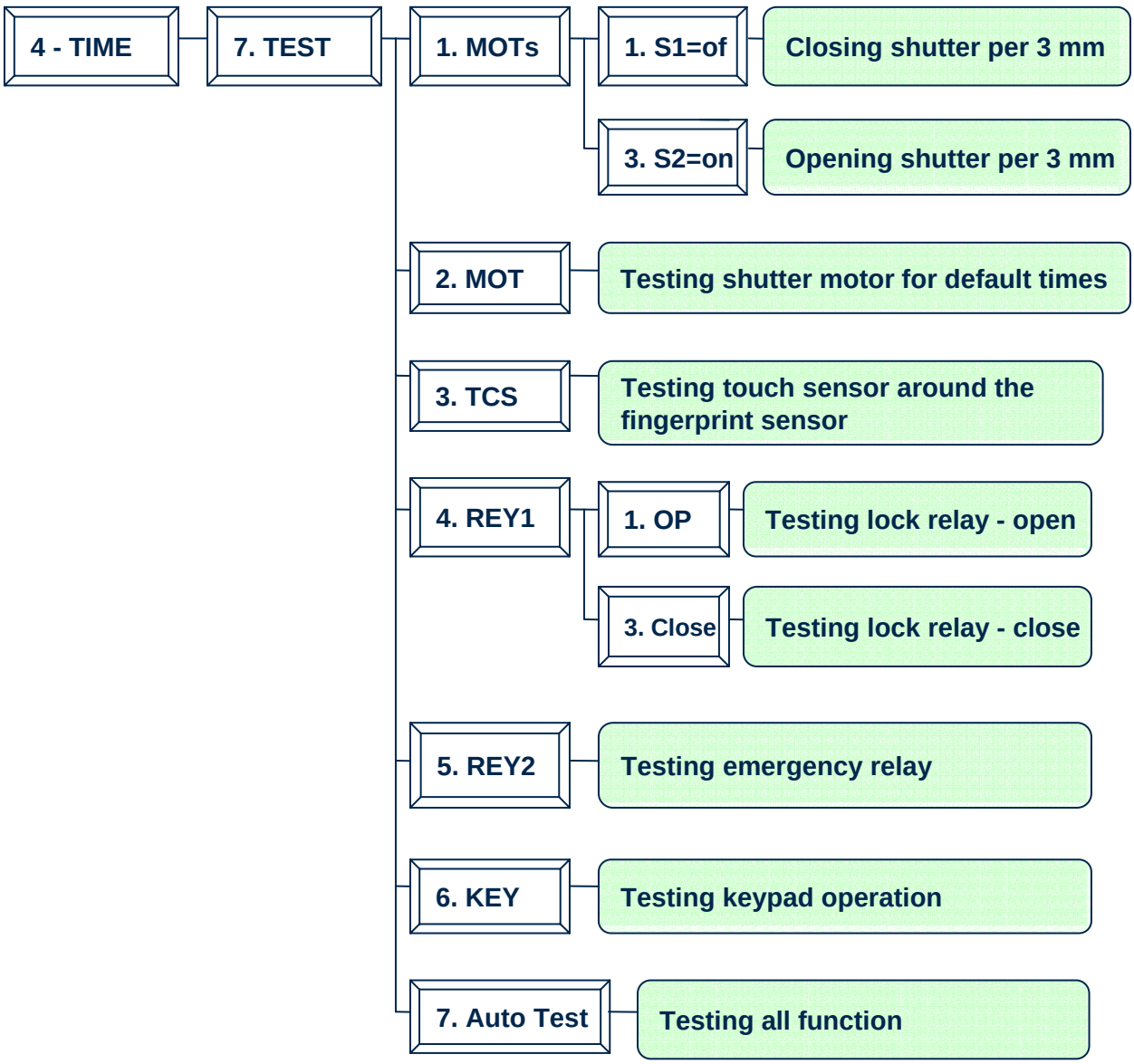
O. Battery Recharge Warning

If external power is not connected, power charge will be required when below battery condition displayed

Battery will be displayed as  and warning sound will be uttered.

- If this warning is ignored and neglected, door lock will stop operation and there is no way to replace with a new back-up battery from out side of door except Hamodu Emergency kit.
  Therefore, Once the warning sound is uttered, please replace with a new battery.

P. Test Menu


4 - TIME
7. TEST
1. MOTs
1. S1=of
Closing shutter per 3 mm
3. S2=on
Opening shutter per 3 mm
2. MOT
Testing shutter motor for default times
3. TCS
Testing touch sensor around the fingerprint sensor
4. REY1
1. OP
Testing lock relay - open
3. Close
Testing lock relay - close
5. REY2
Testing emergency relay
6. KEY
Testing keypad operation
7. Auto Test
Testing all function